**IT Applications Unit 3, AOS 2, Organisations and Data Management**

Complete the following from Ch 3, Data Management Tools, p 87-97

**Data Collection, How is data acquired:**

1. Data collection by forms:
   1. Prior to online forms how was data collected?

Customers would fill out hard copy in the form of a survey etc. This data would then be typed into a data base manually, validated by the operator, and then be saved into the system.

* 1. What were the problems with this method of collection?

The problem with this is that it took a lot of extra time to fill out the hard copy surveys and then have them transferred manually to the data base. Another problem is that the accuracy of the data could be compromised if the validation methods were not adequate.

1. **Direct data collection: Reasons why organisations acquire data via websites:**
   1. Describe four advantages or reasons why organisations directly acquire data from customers.

An advantage of directly acquiring data from customers is that the path from the customer’s data to the database is much shorter with fewer loops. This results in less time wasted waiting for the form to be sent out and less possibility for the form to be lost in the mail. Another advantage is that the data written onto hard copy forms may not be legible – the handwriting may be too messy to read, inputting the data online eliminates this problem. In addition, the accuracy of data input online is more accurate, because the customers’ decisions are input directly instead of being transferred by a third party.

* 1. What is a potential problem with direct access?

A problem that can occur is that the data input by the customer may not be correct, e.g. the wrong email address is entered, and electronic validation will not pick this up.

1. **Why individuals and organisations supply data by websites:,** p 91

Elaborate under each of the following:

* 1. Purchasing of goods and services
     1. Who is of most benefit of purchasing this way?

The people who stand to gain the most from this are those who are housebound – the elderly, sick or children. People who lead very busy lives can also gain from the ease of shopping from home, or on the go from new mobile technology.

* + 1. What is meant by time-poor people?

People who are time poor do not have much spare time to look after chores such as buying groceries. These people often work long hours, or have many other commitments.

* 1. Feedback
     1. What is the nature of feedback sought?

The feedback may contain information about the experience the customer has had with an organisation, a program that has been launched, products and services etc. The feedback may also comment on research, marketing, or generally what the customers think of the organisation.

* 1. Online voting

The vote of a customer can be used to express an opinion. Traditionally, this was done by pen and paper, but now it is possible to do this online, removing the inconvenience of having to sit down at a venue and vote. Online voting can be done anywhere and the data is far easier to manipulate.

* 1. Social Networking

Social networking allows users to communicate and exchange information. This may contain data such as personal details of a user, photos etc. which can be viewed by their friends online and fro remote areas.

1. **Techniques used by organisations to acquire data on websites and reasons for their choice**, p 95
   1. Explain the nature of PHP.

Hypertext pre-processor is a general purpose scripting code that can operate on many webservers, systems and platforms. It is available free of charge. It allows the user to manipulate what data is being viewed, such as on Google maps

* 1. What is a dynamic webpage?

A dynamic website can change according to the requests of the user. It provides a flexible, interactive webpage. Google earth allows users to input a location and then zoom to the areas surrounding it or zoom in and out.

* 1. Give examples of dynamic webpages.

Examples of dynamic webpages include Google Earth, Google Maps, some online banking sites, the Bureau of Meteorology website, etc.

* 1. Explain the nature of ASP.

Active Server Pages is also a script which assists in the building of dynamic websites.

* 1. How does JavaScript differ from PHP and ASP?

JavaScript is on the client side whereas PHP and ASP script are on the server side.

* 1. Back-end tools
     1. What type of information is sought by back end tools such as cPanel and Google Analytics?

The information includes statistics on who visits their website, which browsers are used to do so, what information is commonly searched for, the location of the visitors – overseas or local – how long they stayed on the website and their previous browsing history.

* 1. Cookies
     1. Describe the nature of a cookie.

A cookie is a small file that a web server stores on the user’s computer. It is sent to the computer when a website is browsed, and is stored on the hard drive of the computer. When the website is revisited, it sends the cookie back to the website to exchange the data it collected.

* + 1. What information does a cookie typically contain?

The usually contain information about the user, for example their email address and web-viewing preferences.

* + 1. How can cookies be misused?

Cookies can be misused as spyware, by tracking people and their browsing history, leading to privacy issues. It collects data on the user’s online activity, history, etc. and can also alter the computer’s settings, slowing down connection speeds and changing homepages etc.

* + 1. What is spyware?

Spyware is a file that collects small amounts of information about users without their knowledge. They are typically hidden from the viewer, and installed on the hard disk without expressed permission.

**Techniques used by organisations to protect the rights of individuals and organisations supplying data**, p 96.

**Security protocols**

1. Describe the nature of TLS and SSL

Transport layer security and secure socket layer are protocols used to provide security for communications on the internet. Versions of these protocols are used by the World Wide Web and email.

1. What is the role of HTTPS software?

Hypertext Transfer Protocol Secure is a combination of HTTP and SSL/TLS protocol. It provides encryption and security in terms of identification in the server. It is often used with financial transaction with sensitive data exchange via websites. HTTPS is used to provide a secure medium through the internet.

1. Which port does HTTPS use? How does this compare to HTTP.

HTTPS uses port 443, and the connection that provides is considered secure, whereas HTTP uses port 80 which is not secure, allowing unauthorised people to access the data that is being exchanged.

**Privacy Policies**

1. What is the role of privacy policies?

Privacy Policies are designed to specify how the data an organisation collects can be used and to whom it can be disclosed. It must be displayed on a company’s website, and must be easy to find. The privacy policy allows the user to be aware of the ways personal information may be used by the organisation.

1. What data must a privacy policy contain?

The data a privacy policy must contain includes details about what data is gathered and how it is used.

**Shipping and returns policy**

1. What is the role of these policies?

A shipping and returns policy assists a customer with the process should the order not meet with their satisfaction. If it was broken, not fit for its purpose, or not what the customer was lead to believe, the policy would provide guidance on how to return the order through a postal service, and what rights they have to a refund.